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10/816,813	04/05/2004	Wen-Hsiang Yuch	YUEH3010/EM	2602
23364 7590 10/08/2008 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER				
BRINEY III, WALTER F				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/816,813

**Applicant(s)**

YUEH, WEN-HSIANG

**Examiner**

WALTER F. BRINEY III

**Art Unit**

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 11-21, 23-37, 39-47, 49 and 50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-21, 23-37, 39-47, 49 and 50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10 1. **Claims 1-5, 8-9, 11-19, 23-32, 36-37, 39-47 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2001/0049262 A1 (published 6 December 2001) ("*Lehtonen*") in view of US Patent 5,694,467 (patented 2 December 1997) ("*Young*") and further in view of US Patent 6,233,320 B1 (patented 15 May 2001) ("*Cohen*").**

15 **Claim 1** is limited to a MP3 player. *Lehtonen* also discloses an MP3 player 21 called headset. *Lehtonen* at fig.3, [0030] & [0031]. The *Lehtonen* MP3 player includes a memory comprising the main memory holding the applications and a memory card or a fixed memory that stores MP3 files. *Id.* at [0014]. The main memory of the *Lehtonen* MP3 player comprises an MP3 player module for decoding MP3 files to produce an  
20 audio signal and is executed by the *Lehtonen* DSP. *Id.* at [0030] & [0031]. The MCU is the only control element in headset 21, so all input and output signals are routed through it. *See id.* The decoded MP3 files are presented over right and left speakers 24a, 24b and correspond to the claimed earphone. *Id.* A microphone 25 is further provided for transmitting sound to the *Lehtonen* DSP. *Id.* at [0032]. The microphone 25 is pivotable,  
25 such that it also forms a key inputting unit to transmit a command requested by a user to

said DSP processor. *Id.* at [0033], [0044]. Finally, *Lehtonen* depicts headset 21 with a Bluetooth transceiver BT2 and an antenna ANT2, which together allow a user of the headset to enter into a two-way telephone communication with a remote party's telephone via the mobile telephone 22. *Id.* at fig. 3, [0032] & [0045].

5           In addition to the structural limitations of the claimed MP3 player treated *supra*, this claim further specifies functional limitations of the MP3 player when a telephone call is received at the mobile phone. To wit, when there is an incoming call at the mobile phone, a ring indication is transmitted to the MP3 player's DSP, which enables MP3 playback to be automatically paused while establishing a conversation with the mobile  
10   phone through the earphone and microphone under a suspending operation. *Lehtonen* discloses that after mobile phone 22 receives a call, the headset user optionally lowers the microphone boom 25, causing the MCU to automatically pause MP3 decoding. *See id.* at [0044]—[0045].

          Before continuing the discussion of how *Lehtonen* handles incoming calls, note  
15   that the *automatic* limitation is being interpreted to broadly cover automatic functions performed by MCU in response to a user command, which is evidently applicant's intended interpretation in light of claims 9 and 12-13. Returning now to *Lehtonen*, communication 29 commences between the phone and the headset. *Id.* at [0045].  
However, *Lehtonen* is silent regarding whether the DSP in the headset receives a ring  
20   indication. It is noted that *Lehtonen* discloses notifying a headset user of an incoming call before pausing the music, so that the user can respond by lowering the microphone

boom, but the notification can occur through the mobile phone 22 instead of through the headset DSP and earphone.

*Young* teaches an integrated sound/telephone headset system that allows a user to both listen to a music source and participate in a telephone conversation using the same headset. *Young* at ABSTRACT. *Young* teaches that simply wearing a headset not integrated with the telephone is disadvantageous since the headset 40 reproducing music makes the telephone ring signal hard to hear. *Id.* at col. 1 ll. 11-16. In solution, *Young* mixes the incoming ring signal on phone line 26 with the music feed 16 signals. *Id.* at col. 4 ll. 1-18. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a ring signal to the *Lehtonen* DSP where it is mixed with a decoded MP3 stream as taught by *Young* for the purpose of informing a headset wearer that the *Lehtonen* mobile phone has received a call without the wearer having to strain to hear the ring signal from the mobile phone.

This claim further requires that the DSP processor determines whether the conversation is to be recorded in the memory unit according to the command transmitted from the key input unit. *Lehtonen* fails to teach this salient user-initiated conversation recording function. However, *Cohen* expressly teaches that cell phones, such as *Lehtonen* mobile phone 22, greatly benefit from providing user-initiated conversation recording means, since mobile phone users often lack paper to write down important messages. *Cohen* at col. 1 ll. 36-40, col. 3 ll. 7-20, fig.2. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a user-initiated conversation recording means as taught by *Cohen* for the purpose of allowing a

user of mobile phone 22 to record messages when they lack paper. In adding the *Cohen* recording function to *Lehtonen*, one of ordinary skill in the art would enable the MCU of headset 21, which MCU corresponds to the claimed DSP processor, to determine whether conversations are recorded based on a user input generated by moving boom microphone

5 25. First, all the memory reserved for storing audio is purposely disposed within the headset. *Lehtonen* at ¶ 19. Second, providing memory within phone 22 of *Lehtonen* would work against the goal of *Lehtonen* to minimize the size of phone 22 at the expense of the size of headset 21. *Id.* Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

10 **Claim 2** is limited to the MP3 player of claim 1. *Lehtonen* discloses a display unit within the headset. *Lehtonen* at [0050]. However, the display is only intended for watching video, not for displaying a ring indication message. Assuming that the mobile phone 22 of *Lehtonen* does so, it would be obvious to provide the ring indication message using the same design principles developed by *Young*. To wit, a user watching a video on  
15 headset 21 would be distracted from the mobile phone's display in the same way someone listening to music over a headset would be distracted from a remote phone's ringer. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to bring a ring indication message to the headset's display to better ensure the headset wearer's attention as taught by *Young*.

20 The above analysis presumed that *Lehtonen* even contemplated using a visual display of an incoming call. This is actually a false presumption, but is nevertheless obvious. The examiner takes Official Notice of providing a ring indication message on a

mobile phone's display. For example, caller ID was notoriously affixed to telephonic communication at the time of the invention. Services like caller ID are beneficial for informing a called party of who is calling so they can determine if they wish to answer the call based on the caller's identity. Therefore, it would have been obvious to one of  
5 ordinary skill in the art to display, at least, caller ID information with mobile phone 22 and subsequently transfer that information to the headset so a person wearing the headset can receive a visual indication of a caller's ID as was notoriously well known in the art.

**Claim 3** is limited to the MP3 player of claim 2. As noted in the rejection of claim 2, played messages—i.e., AVI videos—are displayed over the headset's display.  
10 *Lehtonen* at [0050]. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

**Claim 4** is limited to the MP3 player of claim 1. The examiner notes that *Lehtonen* fails to identify the memory of the headset as a non-volatile memory device. However, the memory of the *Lehtonen* headset includes programs essential to the  
15 operation of the headset. *Lehtonen* at [0031]. Using dynamic memories, such as DRAM, would cause the headset to lose all functionality when the battery loses its charge, or is in the process of being replaced. The examiner takes Official Notice of the fact that non-dynamic memories do not require constantly supplied power and, thus, are preferably employed as permanent memory devices. Ergo, it would have been obvious to one of  
20 ordinary skill in the art to use non-dynamic memory to preclude rendering the headset useless when the battery device loses charge.

**Claim 5** is limited to the MP3 player of claim 4. The *Lehtonen* memory device stores the MP3 player program used by the *Lehtonen* DSP. *Lehtonen* at [0030] & [0031]. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

5       **Claim 8** is limited to the MP3 player of claim 1. The *Lehtonen* memory device stores the MP3 player program used by the *Lehtonen* DSP. *Lehtonen* at [0030] & [0031]. The MP3 player program includes the ability to pause playback in response to an incoming call under the suspending operation. *Id.* at [0044]. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

10       **Claim 9** is limited to the MP3 player of claim 8. As noted in the rejection of claim 1, *Lehtonen* causes MP3 playback to pause when a user lowers the boom mic 25 in response to an incoming telephone call at mobile phone 22. *Lehtonen* at [0044]. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

15       **Claim 11** is limited to the MP3 player of claim 1. As shown in the rejection of claim 1, the combination of *Lehtonen* and *Young* teaches providing a ring signal to the headset device 21 of the *Lehtonen* MP3 player. It follows that the *Lehtonen* *Lehtonen* DSP will have to generate the ring tone since it is the only interface between the wireless connection 29, over which the ring indication will be received from phone 22, and the  
20       speakers 24a and 24b. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.



**Claim 12** is limited to the MP3 player of claim 1. As noted in the rejection of claim 1, *Lehtonen* causes MP3 playback to pause when a user lowers the boom mic 25. *Lehtonen* at [0044]. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

5       **Claim 13** is limited to the MP3 player of claim 1. As noted in the rejection of claim 1, *Lehtonen* causes MP3 playback to pause when a user lowers the boom mic 25 in response to an incoming telephone call at mobile phone 22, which also causes a two-way audio path to be setup between the headset 21 and mobile phone 22 so the headset wearer can talk over phone 22.. *Lehtonen* at [0044]—[0045]. Therefore, *Lehtonen* in view of  
10   *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

**Claim 14** is limited to the MP3 player of claim 1. As noted in the rejection of claim 1, BT2 is a Bluetooth transceiver, making the mobile phone a Bluetooth handset. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

15       **Claim 15** is limited to a MP3 player. The player recited in this claim contains all the elements of claim 1. Moreover, it recites an audio outputting interface, corresponding to the *Lehtonen* D/A, for the earphone and an audio inputting interface, corresponding to the *Lehtonen* A/D, for the microphone. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

20       **Claims 16-19 and 23-26** recite essentially the same limitations as claims 2-5 and 11-14, respectively, and are rejected for the same reasons.

**Claim 27** is limited to an audio player. The player recited in this claim contains all the elements of claim 1, and is rejected for the same reasons.

**Claims 28-32, 36-37 and 39-42** recite essentially the same limitations as claims 1-5, 8, 13 and 11-14, respectively, and are rejected for the same reasons.

5       **Claim 43** is limited to a method for an audio player. The headset/audio player of *Lehtonen* described at length *supra* apropos the rejection of claim 1 inherently performs the claimed method. To wit, headset 21 and mobile phone 22 connect to each other using Bluetooth link 29. *Lehtonen* at fig.29. The pausing of playing when a ring indication is received is obvious in view of *Lehtonen* and the teachings of *Young*. *Claim 1 supra*.

10       Two-way voice communication occurs between the headset and mobile phone using the earphone 24a, 24b, microphone 25 and Bluetooth transceiver BT2. *Lehtonen* at [0045]. Determining occurs in accordance with the combination of *Lehtonen* and *Cohen*, where the latter teaches including the ability to record conversations. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

15       **Claims 44-47 and 50** recite essentially the same limitations as claims 14, 11-12, 1 and 2, respectively, and are rejected for the same reasons.

20       **Claim 49** is limited to the method of claim 43. *Cohen* teaches outputting recorded audio from non-volatile memory 14 through conversation playback module 56. See *Cohen* at fig. 2. Therefore, *Lehtonen* in view of *Young* and further in view of *Cohen* makes obvious all limitations of the claim.

2. **Claims 6-7, 20-21 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lehtonen* in view of *Young* in view of *Cohen* and further in view of US Patent Application Publication 2005/0054379 A1 (effective filing date 23 November 1999) ("*Cao*").**

5 **Claim 6** is limited to the MP3 player of claim 1. The *Lehtonen* MP3 player includes a Bluetooth link 29 (corresponding to the wireless transceiver) and a memory card slot (corresponding, in part, to the memory), but no other interfaces for interfacing with, for example, a PC. However, MP3 players including PC interfaces, such as USB, are well established in the art. For example, *Cao* teaches a cordless telephone with MP3  
10 player capability. *Cao* at fig.1 & ABSTRACT. The interface port 122 is a USB port enabling music to be retrieved from the Internet via a PC connected to port 122. *Id.* at [0034]. While the headset 21 of *Lehtonen* is able to retrieve music from the Internet via mobile phone 22, one of ordinary skill would recognize that this tethers headset 21 to mobile phone 22, or a like Bluetooth enabled device. It is obviously advantageous to add  
15 a USB interface to an MP3 player to increase the number of circumstances where headset 21 can be employed.

**Claim 7** is limited to the MP3 player of claim 6. As shown in the rejection of claim 6, it would have been obvious to combine a USB port with the headset of *Lehtonen*. Therefore, *Lehtonen* in view of *Young* in view of *Cohen* and further in view of *Cao*  
20 makes obvious all limitations of the claim.

**Claims 20-21** recite essentially the same limitations as claims 6-7, respectively, and are rejected for the same reasons.

**Claims 33/34 and 35** recite essentially the same limitations as claims 6 and 7, respectively, and are rejected for the same reasons.

***Response to Arguments***

Applicant's arguments filed 02 May 2008 have been fully considered but they are not persuasive. Concerning the rejections made under paragraph 3 of the Non-Final Rejection (Non-Final Rejection 10), Applicant alleges in general that the *Lehtonen* reference is directed to a combination of a headset and a wireless handset, where the headset also acts as an MP3 player while the instant invention is directed to a combination of a headset, wireless handset and a separate MP3 player. Notwithstanding this general characterization of the invention and the prior art, the claims do not make a distinction between a headset with an MP3 player and a headset used in combination with a separate MP3 player. To the contrary, the text of the claim favors interpreting the invention as a headset with an MP3 player since the claims recite, in one instance, "an MP3 player, comprising...an earphone." Read in light of Applicant's specification, this limitation is perhaps best understood in the light Applicant suggests by its instant remarks. But limiting the claim to read as an MP3 player comprising, inter alia, a separate earphone requires imparting the limitation "separate" to the earphone element. This is clearly a violation of the broadest reasonable interpretation standard that is intended to avoid reading limitations from the specification into the claim, and is accordingly not followed here. If Applicant wishes to forward such a distinction between its invention and the prior art, Applicant ought to take advantage of the ability to amend claims during prosecution.

Concerning the conversation recording function formerly found in claims 10, 22, 38 and 48, Applicant alleges that the combination of *Lehtonen*, *Young* and *Cohen* fails to disclose that the DSP of the claimed MP3 player determines when to record a conversation. Specifically, Applicant notes that because *Cohen* is not related to an MP3 player, but to a cellular phone, there is no suggestion to modify the headset-MP3 player of *Lehtonen* to include a recording function as claimed. However, in adding the *Cohen* recording function to *Lehtonen*, one of ordinary skill in the art would enable the *Lehtonen* MCU of headset 21, which MCU corresponds to the claimed DSP processor, to determine whether conversations are recorded based on a user input generated by moving boom microphone 25. First, all the memory reserved for storing audio is purposely disposed within the headset. *Lehtonen* at ¶ 19. Second, providing memory within phone 22 of *Lehtonen* would work against the goal of *Lehtonen* to minimize the size of phone 22 at the expense of the size of headset 21. *Id.*

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WALTER F. BRINEY III whose telephone number is  
5 (571)272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni can be reached on (571) 272-7505. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the  
10 Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business  
15 Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Walter F. Briney III/  
Examiner  
Art Unit 2615